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NOTICE OF ALLOWANCE AND FEE(S) DUE

530 7590 1926/2009
LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK
600 SOUTH AVENUE WEST
WESTFIELD, NI 07090

EXAMINER					
SMITHERS, MATTHEW					
ART UNIT	PAPER NUMBER				
2437					

DATE MAILED: 10/26/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/518,973	07/29/2005	Takayuki Miura	SONYJP 3.3-373	2910		
TITLE OF INVENTION; DEVICE AUTHENTICATION SYSTEM						

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/26/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NO THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used I correspondence including d below or directed off ions.	or tran	smitting the ISSU Patent, advance or in Block 1, by (a	E FEE and PUBLIC ders and notification) specifying a new o					tould be completed where correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
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nonprovisional	NO		\$1510	\$300		\$0		\$1810	01/26/2010
EXAM	INER		ART UNIT	CLASS-SUBCLASS	S				
SMITHERS,	MATTHEW		2437	713-155000					
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ess an assignee is ident in 37 CFR 3.II. Comp	" Indica ed. Use	ation form e of a Customer E PRINTED ON T	or agents OR, alte (2) the name of a registered attorney 2 registered patent listed, no name wi THE PATENT (print	rnativ single y or a t attor ill be or typ the pa	e firm (having as a agent) and the name meys or agents. If a printed. te) atent. If an assigna assignment.	memb es of u no nam	er a 2	ocument has been filed for
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

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KRUMHOLZ &			ART UNIT	PAPER NUMBER
600 SOUTH AV WESTFIELD, N			2437	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 909 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 909 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	
10/518,973	MIURA ET AL.	
Examiner	Art Unit	
Matthew B. Smithers	2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. A This communication is responsive to an amendment filed on July 7, 2009.
- The allowed claim(s) is/are 1-16.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) I hereto or 2) to Paper No./Mail Date ____
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Dother

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DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Davy Zoneraich on October 15, 2009.

The application has been amended as follows:

IN THE CLAIMS:

12 (Currently Amended) A computer readable recording medium including a terminal device program in the terminal device that is granted device authentication in the device authentication system according to claim I, the terminal device including a computer, the terminal device program realizing:

a reception function for receiving from the authentication server a random number and

random-number identification information for identifying the random number; a conversion function for generating a conversion value by converting a set of the received random number and the confidential information using a one-way function; and a transmission function for transmitting the generated conversion value, the received random-number identification information, and confidential-information identification information for identifying the confidential information in the authentication server.

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13. (Currently Amended) <u>A computer readable recording medium including</u> an authentication program in the authentication server for granting device authentication to the terminal device according to claim 2, the authentication server including a computer, the authentication program realizing:

a random-number acquisition function for acquiring a random number;
a transmission function for transmitting to the terminal device the acquired random
number and random-number identification information for identifying the random
number:

a reception function for receiving from the terminal device a conversion value, the random-number identification information, and confidential-information identification information;

a random-number identification function for identifying the random number transmitted to the terminal device using the received random-number identification information; a confidential-information identification function for identifying the confidential information of the device terminal using the received confidential-information identification information;

a conversion function for generating a conversion value by converting a set of the identified confidential information and the random number using the same one-way function as that used by the terminal device; and

a device authentication function for granting device authentication to the terminal device using the received conversion value and the generated conversion value.

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14. (Currently Amended) <u>A computer readable recording medium including</u> a service server program in the service server according to claim 4, the service server including a computer, the service server program realizing:

a random-number acquisition function for acquiring a random number:

a random-number transmission function for transmitting the acquired random number to the terminal device;

a reception function for receiving from the terminal device a conversion value generated using the confidential information and confidential-information identification information; a random-number identification function for identifying the random number transmitted to the terminal device;

an authentication-information transmission function for transmitting, to the authentication server, authentication information including the received conversion value, the confidential-information identification information, and the identified random number: and

an authentication-result reception function for receiving from the authentication server a result of authentication based on the transmitted authentication information.

15. (Currently Amended) <u>A computer readable recording medium including</u> a terminal device program in the terminal device receiving a service from the service server according to claim 4, the terminal device including a computer, the terminal device program realizing:

a random-number reception function for receiving a random number from the service server:

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a conversion function for generating a conversion value by converting a set of the received random number and the confidential information by the use of a one-way function; and a transmission function for transmitting the generated conversion value and confidential-information identification information for identifying the confidential information in the authentication server.

16. (Currently Amended) A computer readable recording medium including an authentication program in the authentication server for granting device authentication to the device terminal when the service server according to claim 4 provides a service, the authentication server including a computer, the authentication program realizing: a reception function for receiving, from the service server, authentication information including a conversion value, confidential-information identification information, and a random number;

a confidential-information identification function for identifying the confidential information of the terminal device by the use of the received confidential-information identification information:

a conversion function for generating a conversion value by converting a set of the received random number and the identified confidential information by the use of the same one-way function as that used by the terminal device; and a device authentication function for granting device authenticating to the terminal device by the use of the received conversion value and the generated conversion value.

Allowable Subject Matter

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The following is an examiner's statement of reasons for allowance: The present invention is directed to a method and system for authenticating electronic consumer devices in a network. Each independent claim identifies the uniquely distinct features of "the terminal device acquires a random number and random number identification information identifying the random number, and generates a conversion value by converting a set of the acquired random number and the confidential information using a one-way function; the authentication server acquires (i) the random number acquired by the terminal device, using the random number identification information acquired by the terminal device, (ii) the confidential information of the terminal device, and (iii) the conversion value generated by the terminal device;

a conversion value is generated by the authentication server by converting the set of the acquired random number and the confidential information acquired by the authentication server using the same one-way function as that used by the terminal device; and the conversion value generated by the terminal device is compared with the conversion value generated by the authentication server. The closest prior art, Saito US 7,317,798, fails to anticipate or render the above underlined limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B. Smithers whose telephone number is (571) 272-3876. The examiner can normally be reached on Monday-Friday (8:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel L. Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew B Smithers/ Primary Examiner, Art Unit 2437